ABSTRACT OF THE DISCLOSURE

A control apparatus for an on-vehicle electricity storage device, which enables an appropriate charging of the on-vehicle electricity storage device while preventing degradation of the on-vehicle electricity storage device. The counter value of a high voltage maintaining counter CVB14V and the timer value of a sustain time subtraction timer TACG2 are increased over the period after time t1 in which the inter-terminal voltage VB of the battery is maintained to be greater than the predetermined mode switching threshold voltage #VB14V. The counter value and the timer value decrease over the period from time t2 to time t3. At time t3, the operation mode is switched from a non-charging mode to a charging mode.